Message from the Director

The Museum has had a busy time in the year since our last newsletter. Some of the events and projects with which we have been involved include:

- *Immortalizing the Mortal: Art in the Service of Death* exhibit, with the participation of medical and anatomy students
- exhibits related to cardiac valvular and coronary artery disease and on the heart in literature and science as part of the Quebec-wide 24 heures de science event (see next page)
- an exhibit on popular home remedies in Gatineau during the early 1900s
- seminars on topics such as drawing and the pathological specimen with Larose-Osler Library artist-in-residence Lucy Lyons, descriptive skills with Harvard medical student visitors, and congenital cardiac disease with McGill cardiology residents.

Our major goal for the upcoming year is the renovation of the main Museum room. Plans for this have been developed, with the hope that work will be completed in early 2018. Specimens will be displayed securely in well-lit cabinets with modern text displays, including tablets and interactive units. We then will be able to welcome visitors and hold events for McGill staff and the public as well as conduct teaching seminars in a much safer area in a more "user friendly" fashion.

The establishment of the Friends of the Maude Abbott Medical Museum has been a great success! The 2016 project to restore the Stephenson skeleton was completed thanks to the support of the Friends. The project we would like to propose this year is the fabrication of a cabinet to house a beautiful Beauchêne skeleton. Beauchêne, a 19th century anatomist and surgeon, developed a technique for mounting individual bones separately but in the proper anatomical orientation. This skeleton was acquired by the Anatomy Museum in 1914 and is currently enclosed in a movable plexiglass case. A new wood cabinet, similar to that which holds the Stephenson skeleton, would provide a safe enclosure and would enable us to place the two skeletons as a pair in the renovated Museum room. We count on you to renew, or for those of you new to the Museum, to begin, membership in the Friends. Your support will enable us to proceed with this and other projects in the upcoming year.

Rick Fraser, Director

Left: View of the proposed new museum.
Right: A Beauchêne skull, also known as an "exploded skull", is disarticulated and then reassembled with jointed supports that allow for the moving and studying of the skull as a whole or each piece individually. The skeleton we plan to encase was purchased from Maison Tramond, established in the mid-19th century in Paris. The company sold models of human and comparative anatomy and osteological preparations.
New Exhibits

Cardiac Valve Disease

As part of the 2017 Quebec-wide 24 heures de science event held in May, the Museum mounted an exhibit related to cardiac valvular disease. In addition to models, illustrations and examples of normal and abnormal valves (such as those showing endocarditis and rheumatic mitral stenosis), a number of prosthetic valves are displayed. Most of the latter come from a collection donated by Dr. Malcolm Silver (Toronto University Health Network) and include Starr-Edwards, Björk-Shiley, Hall-Kaster and various bi-leaflet valves dating from the early 1960s. Examples of more recently used bio-prosthetic valves and a heart from the pathology collection containing a Starr-Edwards valve inserted at the Royal Victoria Hospital in 1962 are also on display. Opened May 13 at the Museum. Ongoing

Sir James Paget and Osteitis Deformans

On entering the Museum, one of the first objects to capture one’s attention is a deformed skeleton hanging within a large, green-trimmed glass frame. Who was the person behind these bones and what is the disease that distorted them?

The skeleton came from a 53-year-old woman whose disease began in 1930 (at age 39) when she noticed a dull pain in her right leg. Over the next two years, both legs gradually bowed outward and she developed a peculiar impression that her head was getting larger. These symptoms led her to the Royal Victoria Hospital, where she was diagnosed to have osteitis deformans (also known as Paget disease of bone after the English surgeon who first described the condition). She subsequently developed an osteosarcoma in the right side of her skull. Surgical removal of the tumor was undertaken one month before her death; if you look closely at the skeleton, you will see a hole in the skull at the site of the operation. (continued on next page...)

Paget disease is characterized by excessive bone breakdown and compensatory new bone formation. These processes lead to enlarged, abnormally formed and weakened bones manifested clinically by arthritis, fractures, deformities (including thickening of the skull and bowing of the femurs secondary to the compressive weight of the body), and functional abnormalities such as loss of teeth. Many of these features are evident in the Museum skeleton. Radiologic findings such as focal bone thickening (sclerosis) are characteristic. The process is often localized to one or two bones, but may be widespread as in the Museum skeleton. Genetic abnormalities and a family history are present in some patients.

The scientific and medical interest surrounding Paget disease led the patient’s treating physicians and the Museum staff to preserve the skeleton after death, to enable students to better understand the pathology underlying the disease. Almost a century later, the bones continue to educate, both in this fashion and in ways other than that originally envisaged (see side panel). The next time you visit the Museum, we hope that you take the time to view the skeleton from both scientific and “humanistic” perspectives.

Sir James Paget (1814 - 1899) was an English surgeon who has been considered (along with Rudolph Virchow) to be one of the founders of modern pathology. An important part of his pathological study was based on microscopic examination, a feature seen in two of his most famous works: Lectures on Tumors (1851) and Surgical Pathology (1863). The publication for which he is eponymously remembered is: On a form of chronic inflammation of the bones (osteitis deformans). Med Chir Trans 1877; 60: 37–64.

Right: Radiograph of patient’s hands. Notice the focus of dense bone in one of her right fingers.

Thank You to the Friends of the Museum

The project proposed to the Friends of the Museum last year was the restoration of the Stephenson skeleton (Newsletter Vol 1, Fall 2016). This was completed in March, thanks to the expert assistance of Redpath Museum technician Chantal Montreuil and cabinetmaker Nicolas Veaux-Logeat. As might be expected, after the dust was removed, there were several surprises, including complications with long-term wear).

Sir James Paget and Osteitis Deformans

On entering the Museum, one of the first objects to capture one’s attention is a deformed skeleton hanging within a large, green-trimmed glass frame. Who was the person behind these bones and what is the disease that distorted them?

The skeleton came from a 53-year-old woman whose disease began in 1930 (at age 39) when she noticed a dull pain in her right leg. Over the next two years, both legs gradually bowed outward and she developed a peculiar impression that her head was getting larger. These symptoms led her to the Royal Victoria Hospital, where she was diagnosed to have osteitis deformans (also known as Paget disease of bone after the English surgeon who first described the condition). She subsequently developed an osteosarcoma in the right side of her skull. Surgical removal of the tumor was undertaken one month before her death; if you look closely at the skeleton, you will see a hole in the skull at the site of the operation. (continued on next page...)

Paget disease is characterized by excessive bone breakdown and compensatory new bone formation. These processes lead to enlarged, abnormally formed and weakened bones manifested clinically by arthritis, fractures, deformities (including thickening of the skull and bowing of the femurs secondary to the compressive weight of the body), and functional abnormalities such as loss of teeth. Many of these features are evident in the Museum skeleton. Radiologic findings such as focal bone thickening (sclerosis) are characteristic. The process is often localized to one or two bones, but may be widespread as in the Museum skeleton. Genetic abnormalities and a family history are present in some patients.

The scientific and medical interest surrounding Paget disease led the patient’s treating physicians and the Museum staff to preserve the skeleton after death, to enable students to better understand the pathology underlying the disease. Almost a century later, the bones continue to educate, both in this fashion and in ways other than that originally envisaged (see side panel). The next time you visit the Museum, we hope that you take the time to view the skeleton from both scientific and “humanistic” perspectives.

Sir James Paget (1814 - 1899) was an English surgeon who has been considered (along with Rudolph Virchow) to be one of the founders of modern pathology. An important part of his pathological study was based on microscopic examination, a feature seen in two of his most famous works: Lectures on Tumors (1851) and Surgical Pathology (1863). The publication for which he is eponymously remembered is: On a form of chronic inflammation of the bones (osteitis deformans). Med Chir Trans 1877; 60: 37–64.

Right: Radiograph of patient’s hands. Notice the focus of dense bone in one of her right fingers.

Thank You to the Friends of the Museum

The project proposed to the Friends of the Museum last year was the restoration of the Stephenson skeleton (Newsletter Vol 1, Fall 2016). This was completed in March, thanks to the expert assistance of Redpath Museum technician Chantal Montreuil and cabinetmaker Nicolas Veaux-Logeat. As might be expected, after the dust was removed, there were several surprises, including the discovery that the cranial vault was incorrectly rotated 180 degrees and the presence of a label buried in the dust on the cabinet and cabinetmaker Nicolas Veaux-Logeat. As might be expected, after the dust was removed, there were several surprises, including the discovery that the cranial vault was incorrectly rotated 180 degrees and the presence of a label buried in the dust on the cabinet floor indicating that the specimen was mounted in 1826. Other projects we have been able to do with funds donated by the Friends include acquisition of a beautiful oak display cabinet and support of the student art event (see opposite page).

Immortalizing the Mortal: Art in the Service of Death

Although it is traditional to view a museum skeleton from scientific and historical points of view, there are other potentially valuable ways in which it may be considered. One of these is to explore a hypothetical personal story (narrative) behind the specimen. This was the subject of a project during the winter of 2017, in which seven medical and anatomy students were challenged to create something that told a non-scientific story about the woman who became the Paget skeleton. Any medium was acceptable, including poetry, short story, oil, pencil sketch, sculpture, etc. The works were presented by the students at an evening vernissage in the Museum in May (Immortalizing the Mortal: Art in the Service of Death). Donations from the Friends were used to design and print a booklet illustrating their work.

And now, it is a skeleton she leaves behind, a skeleton she is, cage within a cage, with the essence of her uncaptured, existing beyond the confines of the glass walls through which others stare at her shaken, yet unrattled bones.

But let us remodel fractured pieces into fragments of narratives, and chisel chaos into meaning.

Excerpt from Fragmentation of Words and of Bone by Steph A. Pang, McGill MED18.
During the 2013 move of pathological material from the Duff Medical Building to the current Museum site in the Strathcona Building, a number of noteworthy specimens were discovered. That shown here is from one of the first patients admitted to the Royal Victoria Hospital (in October 1894). She suffered from "scarlatina" and repeated episodes of "rheumatism", both undoubtedly related to rheumatic fever caused by Streptococcus infection. She died in 1905 as a result of heart failure secondary to mitral and aortic stenosis. In addition to the early RVH connection, the case is remarkable for the doctors it involved—Drs. CF Martin and JC Meakins were the treating physicians and Dr. John McCrae (*In Flanders Fields*) performed the autopsy.

**Become a Friend**

Membership in the Friends of the Maude Abbott Medical Museum is open to anyone who is interested in the museum and the history of medicine. Your support will allow us to preserve our rich collection and make it available to others for teaching and research. Application can be made by contacting us at medicalmuseum.med@mcgill.ca

**Thank you!**

Special thanks are due to our Friends for their generous donations. Your moral and financial support will have an important impact on new exhibits and the display area we are developing during the coming year.